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BAKER BOTTS L.L.P.

PATENT DEPARTMENT

98 SAN JACINTO BLVD., SUITE 1500

AUSTIN, TX 78701-4039

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/717,363
Filing Date: November 19, 2003
Appellant(s): FISCHER ET AL.

Andreas Grubert
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 02/14/2008 appealing from the Office action mailed 09/26/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0177406 A1	O'Connor et al.	11/28/02
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4,633,515	Uber et al.	12/30/86
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-7, 9-11, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by **O’Conner et al (US 2002/0177406 A1)**.

Consider **claim 1**, O’Conner et al disclose a method for receiving first and further signals using a receiver, the first and further signals differing in at least one of the transmission parameters: data rate, modulation type, wake-up criterion, synchronization and threshold (paragraphs 9, 10 and 13; read as the receiver receives first and second signals each in different formats), comprising the steps of: a) in a first step in a quiescent mode (paragraphs 10, 31; read as substantially stationary) of the receiver, performing receiving and searching for a first wake-up criterion (abstract, figure 6, paragraphs 13, 14, 33-35, 40; read as wake up pattern) intermittently using a first preset adjustable configuration of transmission parameters tuned for receiving the first wake-up criterion with a first data rate and/or a first modulation type and/or a first threshold (figure 6, paragraphs 13, 14, 33-35, 40; read as receiver includes ASK and FSK mode wherein it

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can be used for both devices) b) when the first wake up criterion is not received or found (figure 2; paragraphs 15, 39-40; read as ASK alerts the receiver assembly to incoming FSK transmission) in said quiescent mode, switching the receiver to at least one further configuration different from said first preset adjustable configuration and tuned for receiving a second wake-up criterion and searching for the second wake-up criterion (figure 2, paragraphs 15, 39-40; read as causes the receiver assembly to switch to FSK mode), and c) if said first or second wake-up criterion has been received in step a) or b), switching the receiver into an active mode with a respectively selected configuration (paragraph 9).

Consider **claim 6**, O'Conner et al disclose a receiver for receiving first signals and further signals comprising a storage device for loading at least two different pre-definable receive configurations (paragraphs 9, 10 and 13; read as the receiver receives first and second signals each in different formats), wherein the receiver has a quiescent mode (paragraphs 10, 31; read as substantially stationary) in which it intermittently is turned on to receive and search for a first wake-up criterion (read as wake up pattern; abstract, figure 6, paragraphs 13, 14, 33-35, 40) using a first preset adjustable configuration of transmission parameters (read as receiver includes ASK and FSK mode wherein it can be used for both devices; abstract, figure 6, paragraphs 13, 14, 33-35, 40), and the receiver comprises a changeover switch in order to switch to at least one further second configuration different from said first configuration when the first wake-up criterion is not found, and to search for a second wake-up criterion (figure 2, paragraphs 15, 39-40; read as ASK alerts the receiver assembly to incoming transmission and causes the

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receiver assembly to switch to FSK mode), wherein the receiver is operable to switch into an active mode with said first or second configuration, respectively in case of a successful reception of said first or second wake-up criterion (paragraph 9).

Consider **claim 10**, Desai et al disclose a motor vehicle comprising: a receiver for receiving first signals and further signals comprising a storage device for loading at least two different pre-definable receive configurations (paragraphs 9, 10 and 13; read as the receiver receives first and second signals each in different formats), a first device coupled with said receiver (paragraph 25; read as tire pressure monitor system), a second device coupled with said receiver (paragraph 25; read as remote keyless entry system), wherein the receiver is operable to operate in a quiescent mode (paragraphs 10, 31; read as substantially stationary) in which it intermittently is turned on to receive and search for a first wake-up criterion (read as wake up pattern; abstract, figure 6, paragraphs 13, 14, 33-35, 40) using a first adjustable configuration of transmission parameters (read as receiver includes ASK and FSK mode wherein it can be used for both devices; abstract, figure 6, paragraphs 13, 14, 33-35, 40), and wherein the receiver comprises a changeover switch in order to switch to at least a second preset adjustable configuration different from said first preset adjustable configuration when no signal is received and the first wake-up criterion is not found using said first preset adjustable configuration, and to search for a second wake-up criterion (figure 2, paragraphs 15, 39-40; read as ASK alerts the receiver assembly to incoming transmission and causes the receiver assembly to switch to FSK mode), wherein the receiver is operable to switch into an active mode with said first or

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second preset adjustable configuration, respectively in case of a successful reception of said first or second wake-up criterion (paragraph 9).

Consider **claim 2**, and **as applies to claim 1 above**, O'Conner et al further disclose wherein when no signal is received and no wake-up criterion is found using at least one further configuration, the process starts again with step a) (figure 2, paragraphs 15, 39-40)

Consider **claim 3**, **as applied to claim 1**, O'Conner et al disclose that the first device is a remote keyless entry system and said second device is a tire pressure monitoring system (paragraph 25).

Consider **claim 4**, and **as applies to claim 1 above**, O'Conner et al disclose that wherein on receiving successfully and finding a wake-up criterion by step a) or b), the receiver goes out of the quiescent mode into an active mode using the configuration that was successful for the reception concerned. (paragraph 9)

Consider **claim 7**, and **as applied to claim 6 above**, O'Conner et al disclose wherein the receiver has an active mode that the receiver goes into when reception is successful and a wake-up criterion has been found using the configuration that was successful for the reception concerned. (paragraph 9)

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Consider **claim 9, as applied to claim to 6**, O'Conner et al disclose that a first device is a remote keyless entry system and a second device is a tire pressure monitoring system (paragraph 25).

Consider **claim 11, and as applied to claim 10 above**, O'Conner et al disclose wherein the receiver has an active mode that the receiver goes into when reception is successful and a wake-up criterion has been found using the configuration that was successful for the reception concerned. (paragraph 9)

Consider **claim 13, and as applied to claim to 6**, O'Conner et al disclose that the first device is a remote keyless entry system and said second device is a tire pressure monitoring system (paragraph 25).

Consider **claim 14, and as applied to claim 1 above**, O'Conner et al disclose the claimed invention wherein during quiescent mode, the receiver is turned on in intervals for receiving said first or second wake-up criterion. (paragraphs 10 and 31-40)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 5, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **O’Conner et al (US 2002/0177406 A1)** in further view of **Uber et al (US Patent #4,633,515)**.

Consider **claim 5**, and **as applied to claim 1 above**, O’Conner et al disclose the claimed invention except for mentioning that receiving and detection of a wake up criterion must take place within a preset time.

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In the same field of endeavor, Uber et al. disclose mentioning that receiving and detection of a wake up criterion must take place within a preset time. (figure 1; abstract; column 3 line 58 – column 4 line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the timing scheme taught by Uber et al. into the system of O'Conner et al, such that when the communication device did not receive a wake up signal and can not detect any wake up criterion within a preset time, it switches to another mode and tries to receive the wake up signal and detect the wake up criterion, for the purpose of further reducing current draw.

Consider **claim 8**, and **as applied to claim 6 above**, O'Conner et al disclose the claimed invention except for wherein the receiver has a time-control unit so that the switchover using the changeover switch occurs within a preset time at the latest.

In the same field of endeavor, Uber et al. disclose the receiver has a time-control unit so that the switchover using the changeover switch occurs within a preset time at the latest. (figure 1; abstract; column 3 line 58 – column 4 line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the timing scheme taught by Uber et al. into the system of O'Conner et al, such that when the communication device did not receive a wake up signal and can not detect any wake up criterion within a preset time, it switches to another mode and tries to receive the wake up signal and detect the wake up criterion, for the purpose of further reducing current draw.

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Consider **claim 12**, and **as applied to claim 10 above**, Rotzoll, as modified by Desai et al, disclose the claimed invention except for wherein the receiver has a time-control unit so that the switchover using the changeover switch occurs within a preset time at the latest.

In the same field of endeavor, Uber et al. disclose the receiver has a time-control unit so that the switchover using the changeover switch occurs within a preset time at the latest. (figure 1; abstract; column 3 line 58 – column 4 line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the timing scheme taught by Uber et al. into the system of O’Conner et al, such that when the communication device did not receive a wake up signal and can not detect any wake up criterion within a preset time, it switches to another mode and tries to receive the wake up signal and detect the wake up criterion, for the purpose of further reducing current draw.

(10) Response to Argument

Independent Claim 1

Applicant argues that O’Conner discloses a different system than the present application. Applicant initially argues that O’Conner is not intermittently activating a receiver. Rather O’Connor teaches to switch from a first mode into a second mode by means of a single wake-up signal which can be received when in the first mode.

The Examiner respectfully disagrees. Claim 1 discloses “... in a first step in a quiescent mode of the receiver, performing receiving and searching for a first wake-up criterion intermittently using a first preset adjustable configuration...” O’Connor discloses that the receiver assembly defaults to the ASK mode. In the ASK mode the

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receiver operates at a lower power (read as quiescent) and is therefore the default mode that is on when the receiver assembly is activated. The ASK wake up signal alerts the receiver assembly to incoming FSK transmission, which causes the receiver assembly to switch to the active mode. The switch between ASK and FSK mode provides use of a signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 15). In other words, if the receiver is in its default state, i.e. ASK mode, that indicates that the receiver is operating at a lower power. Then a triggering event will occur, which can preferably be a receipt of the wake up signal (paragraph 39). Other triggering events could be conditions of the motor vehicle traveling above the desired speed or in a parked position (paragraph 39). These triggering events are definite indicators for the switch between FSK and ASK modes. (paragraph 39). When the receiver switches from the ASK to FSK mode, the receiver is intermittently activating a receiver. Furthermore, O'Connor discloses the switch between ASK and FSK modes 58,52 (figure 2) provides use of the signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 40).

If the Applicant intends to differentiate between switching between ASK and FSK modes of O'Conner and intermittently activating a receiver of the present application, then such differences should be made explicit in the claims. As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

Furthermore, Applicant alleges that according to independent claim 1, when the receiver is in a low power mode (quiescent mode), the receiver is intermittently switched

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from mode A to mode B. In each mode, the receiver watches for a respective wake-up signal. Thus, if the receiver is in mode A, a B-mode wake up signal will not turn the system on. However, a B-mode wake-up signal when received while the receiver is in B-mode will switch the receiver into active. In this active mode, the receiver will remain in its respective configuration. Hence, contrary to O'Conner, a trigger signal such as the ASK wake-up signal will not switch the configuration. O'Conner merely discloses the switching from one configuration into a second configuration using a wake-up or trigger signal. Thus, a current configuration is switched to another configuration due to the wake-up or trigger signal. The present application does not claim such a mechanism.

The recited claim language does not teach "if the receiver is in mode A, a B-mode wake up signal will not turn the system on" or "a B-mode wake-up signal when received while the receiver is in B-mode will switch the receiver into active." The claim language discloses that "in a first step in a quiescent mode of the receiver, performing receiving and searching for a first wake-up criterion intermittently using a first preset adjustable configuration of transmission parameters tuned for receiving the first wake-up criterion with a first data rate and/or a first modulation type and/or a first threshold; when the first wake-up criterion is not received or found in said quiescent mode." The Examiner respectfully disagrees with the Applicant. This limitation is not equivalent to "if the receiver is in mode A, a B-mode wake up signal will not turn the system on". The recited claim language is broader than what the Applicant is arguing in the response. The claim language only states that the receiver is in a quiescent mode while performing receiving and searching for a first wake-up criterion to activate the receiver. "When the first wake-up criterion is not received or found in said quiescent mode" has no effect on which

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“mode” the receiver is in. The method is trying to activate the receiver using a first data rate and/or a first modulation type and/or first threshold. In other words, the first data rate and/or a first modulation type and/or first threshold can be any data rate, modulation type, and/or threshold, as long as it is the first transmission parameter. In the O'Connor reference (and as explained above), the receiver assembly defaults to the ASK mode. In the ASK mode the receiver operates at a lower power (read as quiescent) and is therefore the default mode that is on when the receiver assembly is activated. The ASK wake up signal alerts the receiver assembly to incoming FSK transmission, which causes the receiver assembly to switch to FSK mode (paragraph 15). A triggering event, i.e. the received wake-up signal has been found due to the fact the motor vehicle has traveled above a desired speed, can be interpreted by one of ordinary skill in the art as the first wake-up criterion being received. For example, if the desired speed is 25 mph, and the motor vehicle is traveling at 20 mph, the receiver will not switch from the ASK mode to FSK mode. As the claim language states, when the first wake-up criterion is not received, the method switches to at least one other configuration. If the motor vehicle then accelerates to a speed of 30 mph, this will trigger the receiver to switch from ASK to FSK mode. In other words, a second wake-up criterion (achieving 30 mph) has been received which then switches the receiver to an active mode. Even though the receiver has not been activated because the motor vehicle is traveling under the desired speed, receiving and searching is still being performed to switch the receiver to FSK mode. One of ordinary skill in the art can interpret this as the first step of performing receiving and searching. Then, when the motor vehicle travels above the desired speed and hence into the second configuration, the triggering event occurs to switch the receiver into FSK

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mode. One of ordinary skill in the art can interpret this as switching the receiver to at least one further configuration different from said first preset adjustable configuration. The Applicant may further argue that the second configuration (i.e. traveling above the desired speed) is not different from the first preset adjustable configuration. However, the Examiner will argue that these are two different configurations because the desired speed is the threshold that triggers the switch of the receiver. The method is still performing receiving and searching while the motor vehicle is traveling under 25 mph (read as the first configuration), but due to the fact that the motor vehicle has not accelerated past 25 mph, the receiver will not switch modes. Once the motor vehicle accelerates past 25 mph (read as at least one further configuration different from said first preset adjustable configuration), the receiver will switch modes.

If the Applicant intends to differentiate between the different triggering events of O'Connor and the different configurations of the present application, then such differences should be made explicit in the claims. As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

In addition, Applicant argues that the Examiner stated that O'Connor discloses that the ASK mode is a lower power mode and, hence, the Examiner compares this ASK mode to the quiescent mode. However, even if the ASK mode is considered as the quiescent mode, which Applicant does not concede, O'Connor does not teach to switch from this ASK mode into an active mode with either a first or second configuration as required by claim 1.

The Examiner respectfully disagrees. O'Connor discloses that the receiver assembly defaults to the ASK mode. In the ASK mode the receiver operates at a lower power (read as quiescent) and is therefore the default mode that is on when the receiver assembly is activated. The ASK wake up signal alerts the receiver assembly to incoming FSK transmission, which causes the receiver assembly to switch to FSK mode. The switch between ASK and FSK mode provides use of a signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 15). In other words, if the receiver is in its default state, i.e. ASK mode, that indicates that the receiver is operating at a lower power. Then a triggering event will occur, which can preferably be a receipt of the wake up signal (paragraph 39). Other triggering events could be conditions of the motor vehicle traveling above the desired speed or in a parked position (paragraph 39). These triggering events are definite indicators for the switch between FSK and ASK modes. (paragraph 39). When the receiver switches from the ASK to FSK mode, the receiver is intermittently activating a receiver. Furthermore, O'Connor discloses the switch between ASK and FSK modes 58,52 (figure 2) provides use of the signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 40).

If the Applicant intends to differentiate between switching between ASK and FSK modes of O'Connor and intermittently activating a receiver of the present application, then such differences should be made explicit in the claims. As a result, the argued features are written such that they read upon the cited references; therefore, the previous rejection still applies.

Independent Claims 6 and 10

Applicant argues that O'Connor does not disclose a quiescent mode in which the receiver is most of time inoperable and only for short period of times activated.

The Examiner respectfully disagrees. Claim 1 discloses "... in a first step in a quiescent mode of the receiver, performing receiving and searching for a first wake-up criterion intermittently using a first preset adjustable configuration..." O'Connor discloses that the receiver assembly defaults to the ASK mode. In the ASK mode the receiver operates at a lower power (read as quiescent) and is therefore the default mode that is on when the receiver assembly is activated. The ASK wake up signal alerts the receiver assembly to incoming FSK transmission, which causes the receiver assembly to switch to the active mode. The switch between ASK and FSK mode provides use of a signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 15). In other words, if the receiver is in its default state, i.e. ASK mode, that indicates that the receiver is operating at a lower power. Then a triggering event will occur, which can preferably be a receipt of the wake up signal (paragraph 39). Other triggering events could be conditions of the motor vehicle traveling above the desired speed or in a parked position (paragraph 39). These triggering events are definite indicators for the switch between FSK and ASK modes.

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(paragraph 39). When the receiver switches from the ASK to FSK mode, the receiver is intermittently activating a receiver. Furthermore, O'Connor discloses the switch between ASK and FSK modes 58,52 (figure 2) provides use of the signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 40).

Furthermore, Applicant argues that the wake-up or trigger signal of O'Conner switches the configuration whereas according to the independent claims no configuration switch takes place when a wake-up signal is successfully received and decoded because the system according to the independent claims 6 and 10 must already be in the correct configuration to be able to receive the respective wake-up signal.

The Examiner respectfully disagrees. O'Connor discloses that the receiver assembly defaults to the ASK mode. In the ASK mode the receiver operates at a lower power (read as quiescent) and is therefore the default mode that is on when the receiver assembly is activated. The ASK wake up signal alerts the receiver assembly to incoming FSK transmission, which causes the receiver assembly to switch to FSK mode. The switch between ASK and FSK mode provides use of a signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 15). In other words, if the receiver is in its default state, i.e. ASK mode, that indicates that the receiver is operating at a lower power. Then a triggering event will occur, which can preferably be a receipt of the wake up signal (paragraph 39). Other triggering events could be conditions of the motor vehicle traveling above the desired speed or in a parked position (paragraph 39). These triggering events are definite indicators for the switch between FSK and ASK modes. (paragraph 39). When the

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receiver switches from the ASK to FSK mode, the receiver is intermittently activating a receiver. Furthermore, O'Connor discloses the switch between ASK and FSK modes 58,52 (figure 2) provides use of the signal receiver for gathering data from several different motor vehicle systems using differing data signal formats (paragraph 40).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Bobbak Safaipoor/

Examiner, Art Unit 2618

Conferees:

Matthew Anderson, Supervisory Patent Examiner 2618

/Matthew D. Anderson/

Supervisory Patent Examiner, Art Unit 2618

Edward Urban, Supervisory Patent Examiner 2618

/Edward Urban/

Supervisory Patent Examiner, Art Unit 2618